
वस्त्रादि — चादर का कपड़ा,
सूती खादी, विरंजित — विशिष्टि
(दूसरा पुनरीक्षण)

**Textiles — Sheeting Cloth, Cotton
Khadi, Bleached — Specification**
(Second Revision)

ICS 59.080.30

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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Handloom and Khadi Sectional Committee had been approved by the Textile Division Council.

This standard was first published in the year 1966 and subsequently revised in 1994. This standard has been again revised to incorporate the following major changes:

- a) Requirement for identification of material has been incorporated;
- b) Sampling plan and criteria for conformity has been modified;
- c) References to Indian Standards have been updated;
- d) BIS certification marking clause has been updated; and
- e) Amendment issued has been incorporated.

The composition of the Committee responsible for the formulation of this standard is given in Annex D.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

**TEXTILES — SHEETING CLOTH,
COTTON KHADI, BLEACHED — SPECIFICATION**
(*Second Revision*)

1 SCOPE

1.1 This standard prescribes constructional particulars and other requirements of sheeting cloth, cotton khadi, bleached.

1.2 This standard does not specify the general appearance, feel, etc of the cloth.

2 REFERENCES

The standards listed in Annex A contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

3 ATMOSPHERIC CONDITIONS FOR TESTING

Test specimens may be conditioned and tested in the prevailing atmospheric conditions for checking the conformity of the cloth to the standard. However, in case of dispute, the specimens shall be conditioned and tested in the standard atmosphere as specified in the referred Indian Standards on test methods.

4 GENERAL REQUIREMENTS**4.1 Yarn**

The yarn used in the manufacture of sheeting cloth shall be hand spun from clean carded cotton. It shall be reasonably even and free from leaf particles, slubs, neps and other spinning defects. The approximate count of warp and weft yarn is given in Table 1.

4.2 Cloth

4.2.1 The selvages shall be firm and well woven.

4.2.2 The cloth shall be free from blueing materials and substances liable to cause tendering.

4.2.3 The cloth when visually examined, shall be reasonably free from spinning, weaving and processing defects.

5 REQUIREMENTS

5.1 The constructional particulars and breaking load of the sheeting cloth shall conform to the requirements specified in Table 1.

5.2 The sheeting cloth shall also conform to the other requirements specified in Table 2.

5.3 The sheeting cloth shall be woven in plain weave.

**Table 1 Constructional Particulars and Breaking Load Requirements
for Sheetting Cloth, Cotton Khadi**
(*Clauses 4.1 and 5.1*)

Count of Yarn (for Guidance only) Universal Count (Cotton Count)		Ends/dm	Picks/dm	Mass g/m ²	Breaking Load (on 10.0 × 20 cm Strips), N	
Warp	Weft				Warp	Weft
(1)	(2)	(3)	(4)	(5)	(6)	(7)
49 tex (12s)	49 tex (12s)	158	158	170	450	450
Tolerance, percent	—	±5	±10	±10	-10	-10
(← ----- see Note ----- →)						
Method of Test	IS 3442	IS 3442	IS 1963	IS 1963	IS 1964	IS 1969 (Part 1)

NOTE — Any increase in values of mass (g/m²) or breaking load beyond positive tolerance shall not be a cause of rejection of the fabric.

**Table 2 Other Requirements for Sheeting Cloth,
Cotton Khadi, Bleached**
(Clause 5.2)

Sl No.	Characteristics	Requirements	Method of Test
(1)	(2)	(3)	(4)
i)	Identification of material (<i>see</i> Note)	100 percent cotton	IS 667
ii)	Dimensional change, percent, <i>Max</i>	5	IS 2977
iii)	Scouring loss, percent, <i>Max</i>	2.5	IS 1383
iv)	pH value of the aqueous extract	6.0 to 8.5	IS 1390 (Cold method)
NOTE — Impurities of less than 0.2 percent shall be permitted.			

5.4 Dimensions

Length and width of the sheeting cloth when determined in accordance with IS 1954 shall be as agreed to between the buyer and the seller or as declared by the seller subject to the tolerances notified by the Government of India, Ministry of Commerce and Industry vide Notification No. S.O. 2937 dated 20 September 1962 issued under *Trade and Merchandise Marks Act*, 1958 (43 of 1958) (*see* Annex B).

5.5 Sealed Sample

5.5.1 In order to illustrate or specify the indeterminable characteristics, such as general appearance, lustre, feel and shade, if sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

5.5.2 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

6 FREEDOM FROM DEFECTS

The sheeting cloth when visually inspected shall be free from the major flaws listed at Annex C. However, the number of permissible major flaws per unit length may be as agreed to between the buyer and the seller.

7 MARKING

7.1 The sheeting cloth shall be suitably marked with the following information:

- Name of the material, for example, sheeting cloth, cotton khadi;
- Length (m) and width (cm);

- Indication of the source of manufacture; and
- Other declarations required as per law in force.

7.2 BIS Certification Marking

The sheeting cloth conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the sheeting cloth may be marked with the Standard Mark.

8 PACKING

Unless otherwise agreed upon by the buyer and the seller the sheeting cloth shall preferably be packed in bales or cases in conformity with the procedure laid down in IS 1347 or IS 293.

9 SAMPLING

9.1 Lot

The quantity of the sheeting cloth delivered to buyer against one despatch note shall constitute a lot.

9.2 The conformity of the lot to the various requirements specified in the standard shall be determined on the basis of tests carried out on the samples selected from the lot.

9.3 Unless otherwise agreed, the number of pieces selected at random for inspection shall be in accordance with Table 3.

9.3.1 For selection of samples at random from the lot, procedure given in IS 4905 may be followed.

Table 3 Sample Size and Permissible Number of Non-conforming Pieces
(*Clauses 9.3 and 9.4*)

Lot Size	Sample Size	Permissible Number of Non-conforming Pieces	Sub-sample Size
(1)	(2)	(3)	(4)
Up to 90	5	0	3
91 to 150	8	0	3
151 to 500	13	1	5
501 to 1 200	20	1	5
1 201 to 10 000	32	2	8
10 001 to 35 000	50	3	8
35 001 to 5 00 000	80	5	13
5 00 001 and above	125	7	13

9.4 Number of Samples and Criteria for Conformity

It shall be as follows:

Characteristics	Number of Samples	Criteria for Conformity
Ends, picks, length, width and freedom from defects	According to col 2 of Table 3	Number of non-conforming pieces shall not exceed the corresponding number given in col 3 of Table 3.
Mass, dimensional change, scouring loss, pH value, breaking load and identification of material	According to col 4 of Table 3	All the test pieces shall meet the requirement.

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
293 : 1980	Code for seaworthy packaging of cotton yarn and cloth (<i>third revision</i>)	1964 : 2001	Textiles — Methods for determination of mass per unit length and mass per area of fabrics (<i>second revision</i>)
667 : 1981	Methods for identification of textile fibres with supplement (<i>first revision</i>)	1969 (Part 1) : 2018	Textiles —Tensile properties of fabrics: Part 1 Determination of maximum force and elongation at maximum force using the strip method (<i>fourth revision</i>)
1347 : 1972	Specification for inland packaging of cotton and yarn (<i>first revision</i>)	2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water (<i>first revision</i>)
1383 : 1977	Methods for determination of scouring loss in grey and finished cotton textile materials (<i>first revision</i>)	3442 : 1980	Method for determination of crimp and count of yarn removed from fabrics (<i>first revision</i>)
1390 : 1983	Methods for determination of pH value of aqueous extracts of textile materials (<i>first revision</i>)	4905 : 2015	Random sampling and randomization procedures (<i>first revision</i>)
1954 : 1990	Determination of length and width of woven fabrics — Methods (<i>second revision</i>)		
1963 : 1981	Methods for determination of threads per unit length in woven fabrics (<i>second revision</i>)		

ANNEX B*(Clause 5.4)*

**EXTRACTS FROM THE GOVERNMENT OF INDIA, MINISTRY OF
COMMERCE AND INDUSTRY (TRADE AND MERCHANDISE MARKS)
NOTIFICATION NO. S.O. 2937, DATED 20 SEPTEMBER, 1962**

B-1 A trade description of length stamped on grey, bleached, mercerised or coloured cotton piece goods:

- a) in pieces stamped as of length 9 metres and below, the stamped length shall not exceed the actual length by more than 1 percent of the piece length or 7.5 cm, whichever is less, and;
- b) in pieces stamped as of length above 9 metres, the stamped length shall not exceed the actual length by more than 0.6 percent of the piece length or 7.5 cm, whichever is higher.

Provided that the average length of the pieces in question shall not be less than the stamped length.

B-2 A trade description of width stamped on grey, bleached, mercerised or coloured cotton piece goods:

- a) in pieces stamped as of width 102 cm, or below, the stamped width shall not exceed the actual width at any point by more than 1.3 cm;
- b) in pieces stamped as of width over 102 cm, and up to 152 cm, the stamped width shall not exceed the actual width at any point by more than 1.25 percent of the stamped width of the piece; and
- c) in pieces stamped as of width 152 cm and above, the stamped width shall not exceed the actual width at any point by more than 1.25 percent of the stamped width of the piece or 2.5 cm whichever is less.

Provided that average width of the pieces in question shall not be less than the stamped width.

ANNEX C

(Clause 6.1)

LIST OF MAJOR FLAWS

- a) One or more ends missing in the body of the material throughout its length, more than three ends missing at a place and running over 60 cm, or prominently noticeable double end running throughout the piece.
- b) Undressed snarls noticeable over a length exceeding 5 percent of the length of the piece.
- c) Smash definitely rupturing the texture of the fabric.
- d) Hole, cut or tear.
- e) Reed marks prominently noticeable over a length exceeding 5 percent of the length of the piece.
- f) Defective or damaged selvedge noticeable over a length exceeding 5 percent of the length of the piece.
- g) Weft crack of two or more missing picks across the width of the fabric.
- h) Warp or weft bar due to the difference in raw material, count, twist, lustre or spacing of adjacent groups of yarns (starting mark).
- j) More than two adjacent ends running parallel, broken or missing and extending beyond 10 cm.
- k) Noticeable warp or weft float in the body of the fabric.
- m) Noticeable oil or other stain in the fabric.
- n) Oily weft in the fabric.
- p) Prominently noticeable slub.
- q) Gout due to foreign matter usually lint or waste woven into the fabric.
- r) Prominent selvedge defect.
- s) Fuzzy appearance.
- t) Significant shading or listing in fabric having a gradual change in tone or depth of shade of fabric (excluding selvedge or border running parallel to the selvedge).
- u) Coloured flecks.
- v) Blurred or dark patch.
- w) Patchy, streaky or uneven dyeing.
- y) Dye bar.

ANNEX D*(Foreword)***COMMITTEE COMPOSITION**

Handloom and Khadi Sectional Committee, TXD 08

<i>Organization</i>	<i>Representative(s)</i>
Weavers Service Centre, Delhi	SHRI VISHESH NAUTIYAL (Chairman) SHRI VIKAS KUMAR (<i>Alternate</i>)
All India Handloom Fabrics Marketing Cooperative Society Ltd, Delhi	SHRI R. UTHAMAN SHRI SHRIKANT (<i>Alternate</i>)
Association of Corporations of Apex Societies of Handlooms, Delhi	SHRI ABDUL REHMAN SHRI PALLAB TALUKDAR (<i>Alternate</i>)
Baster Adimjati Sewak Sangh, Baster	SHRI SUMIT DAS SHRI AMIT DAS (<i>Alternate</i>)
Commissioner Handloom & Textiles, Himachal Pradesh	REPRESENTATIVE OF COMMISSIONER & DIRECTOR OF INDUSTRIES
Commissionerate of Handlooms & Textiles, Chennai	THIRU. C. MUNIANATHAN SHRI K. KARNAN (<i>Alternate</i>)
Director Handloom & Textiles, Madhya Pradesh	DIRECTOR SHRI MAHESH GULATI (<i>Alternate</i>)
Haryana Khadi Gramodyog Sangh , Karnal	SHRI PAWAN GARG SHRI R. S. YADAV (<i>Alternate</i>)
Indian Institute of Handloom Technology, Jodhpur	SHRI JITENDER TAK
Indian Institute of Handloom Technology, Varanasi	SHRI S. K. ROHILLA
J & K Handloom Development Corporation Ltd, Jammu Tawi	MANAGING DIRECTOR SHRI VINOD KAUL (<i>Alternate</i>)
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Khadi & Village Industries Commission, New Delhi	SHRI V. K. NAGAR SHRI RAM NARAYAN (<i>Alternate I</i>) SHRI A. K. AHLUWALIA (<i>Alternate II</i>)
Khadi Dyers & Printers, Mumbai	SHRI D. N. BHATT SHRI V. D. JOSHI (<i>Alternate</i>)
Ministry of Defence (DGQA), New Delhi	SHRI M. H. BASAVRAJ SHRI N. SENTHIL KUMAR (<i>Alternate</i>)
National Handloom Development Corporation Ltd, Greater Noida	DR SAKTHIVEL PERUMAL SAMY SHRI JITENDRA TOLAMBIYA (<i>Alternate</i>)
Office of Development Commissioner (Handlooms), New Delhi	DR S. ADINARAYANA SHRI VINAY KUMAR (<i>Alternate</i>)
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Sushil Gramodyog Sanstha, Ghaziabad	SHRI SUNIL TYAGI
Swastik Gramodyog Samiti, Delhi	SHRI M. L. PATHAK SHRI ABHISHEK DIXIT (<i>Alternate</i>)
Textiles Committee, New Delhi	SHRI PARVEJ AHMED SHRIMATI SHILPI CHAUHAN (<i>Alternate</i>)

<i>Organization</i>	<i>Representative(s)</i>
The Handicrafts & Handloom Exports Corporation of India Ltd, NOIDA	SHRI NIRMAL SINHA SHRI A. V. SINGH (<i>Alternate</i>)
The Handloom Export Promotion Council, Chennai	DR M. SUNDAR
The Tamil Nadu Handloom Weavers' Cooperative Society Ltd, Chennai	SHRI T. N. VENKATESH SHRI K. KATHIRESAN (<i>Alternate</i>)
In personal capacity [<i>148, II Floor, Sector 8, Faridabad, Haryana 121 006</i>]	SHRI B. B. PAUL
BIS Directorate General	SHRI A. K. BERA, SCIENTIST 'F' AND HEAD (TXD) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary

SHRI J. K. GUPTA
SCIENTIST 'D' (TXD), BIS

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